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10/575,079	01/24/2007	Gerhard Schwenk	SCHW3006/JEK	8639
23364 7590 12/19/2008 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER				
LEWIS, JUSTIN V				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/575,079

**Applicant(s)**

SCHWENK ET AL.

**Examiner**

JUSTIN V. LEWIS

**Art Unit**

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 September 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-34 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 07 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-2, 5-8, 10-12, 15-16, 21-23 and 30-31 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,506,476 to Kaule et. al. ("Kaule") in view of U.S. Patent No. 4,455,039 to Weitzen et. al. ("Weitzen").

Regarding claim 1, Kaule discloses a value document, comprising a value document substrate (label 2) and a first feature substance (luminescent substance 6) for enabling checking of the authenticity of the value document, the first feature substance being incorporated into the volume of the substrate of the value document (see fig. 3), but fails to disclose a second feature substance.

Weitzen teaches the concept of providing a value document with a second feature substance (coating in the form of bands 3, 4 and 5) that is formed by a luminescent substance which is provided on the value document substrate (see col. 1, lines 31-35) in the form of a coding (see col. 1, lines 37-38), said coding also enabling value recognition of the document (see col. 3, lines 58-61).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to place the Weitzen coating upon the Kaule value document as desired during its production, in order to render the document more difficult to counterfeit, as explicitly taught by Weitzen (see col. 1, lines 31-33).

Regarding claim 2, Kaule in view of Weitzen discloses the value document according to claim 1, wherein the first feature substance is distributed substantially uniformly within the volume of the value document substrate (see Kaule fig. 3).

Regarding claim 5, Kaule in view of Weitzen discloses the value document according to claim 1, wherein at least one of the feature substances is formed on the basis of a host lattice doped with rare earth elements (see Kaule col. 1, lines 5-8).

Regarding claim 6, Kaule in view of Weitzen discloses the value document according to claim 1, wherein the coding extends over a predominant part of a surface of the value document (see Weitzen fig. 1).

Regarding claim 7, Kaule in view of Weitzen discloses the value document according to claim 1, wherein the coding is a bar code (see Weitzen col. 1, lines 37-38).

Regarding claim 8, Kaule in view of Weitzen discloses the value document according to claim 1, wherein the first feature substance is present in coded form (note

that the presence of Kaule luminescent particles indicates a legitimate document, whereas the lack of such particles indicates a counterfeit), and the coding of the first feature substance lies in the material properties of the first feature substance (note that the coding of the Kaule feature substance lies in its luminescence).

Regarding claim 10, Kaule in view of Weitzen discloses the value document according to claim 1, wherein the value document substrate comprises a printed or unprinted plastic film (see Kaule col. 3, lines 19-22).

Regarding claim 11, Kaule in view of Weitzen discloses the value document according to claim 1, wherein the second feature substance is printed on the value document substrate (see Weitzen col. 1, lines 331-35).

Regarding claim 12, Kaule in view of Weitzen discloses the value document according to claim 1, wherein the substrate is paper formed from a moist paper web during its production (note that the use of a paper substrate would require that it be in the form of a moist paper web during its production), and the second feature substance is applied to the moist paper web in the form of the coding during papermaking (see the combination set forth in the rejection of claim 1, above).

Regarding claim 15, Kaule as modified by Weitzen (in the manner set forth in the rejection of claim 1, above) discloses a method for producing a value document according to claim 1, comprising the steps: i) incorporating the first feature substance into the volume of the value document substrate (see Kaule fig. 3); and ii) applying the second feature substance to the value document substrate (see Weitzen fig. 1) in the form of a coding (see Weitzen col. 1, lines 37-38).

Regarding claim 16, Kaule as modified by Weitzen (in the manner set forth in the rejection of claim 1, above) discloses the production method according to claim 15, wherein the second feature substance is printed on the value document substrate (see Weitzen col. 1, lines 331-35).

Regarding claim 21, Kaule as modified by Weitzen (in the manner set forth in the rejection of claim 1, above) discloses a method for checking or processing a value document according to claim 1, comprising the steps: i) checking the authenticity and value of the value document by checking the authenticity of the value document by using at least one characteristic property of either or both the first feature substance and the luminescent substance (note that the presence of Kaule luminescent particles indicates a legitimate document, whereas the lack of such particles indicates a counterfeit) and using the coding forming by the luminescent substance for carrying out value recognition of the value document (note that the absence of luminescent particles indicates an absolute lack of value).

Regarding claim 22, Kaule as modified by Weitzen (in the manner set forth in the rejection of claim 1, above) discloses the method according to claim 21, wherein at least one characteristic property of the first feature substance is used for checking the authenticity of the value document (note that the presence of Kaule luminescent particles indicates a legitimate document, whereas the lack of such particles indicates a counterfeit), and the coding formed by the first feature substance is used for the value recognition of the value document (note that the absence of luminescent particles indicates an absolute lack of value), by a user of the first user group.

Regarding claim 23, Kaule as modified by Weitzen (in the manner set forth in the rejection of claim 1, above) discloses the method according to claim 22, wherein at least one characteristic property of the luminescent substance is used for checking the authenticity of the value document (note that the presence of Kaule luminescent particles indicates a legitimate document, whereas the lack of such particles indicates a counterfeit), and the coding formed by the luminescent substance is used for the value recognition of the value document (note that the absence of Kaule luminescent particles indicates an absolute lack of value), by a user of a second user group.

Regarding claim 30, Kaule in view of Weitzen discloses the value document according to claim 6, wherein the coding extends over substantially the total surface of the value document (see Weitzen fig. 1).

Regarding claim 31, Kaule in view of Weitzen discloses the value document according to claim 8, wherein the material properties comprise at least one of the emission and excitation spectra of the first feature substance (see Kaule col. 1, lines 19-23).

4. Claims 3-4, 13-14, 18-20, 25-29 and 32-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule in view of Weitzen and further in view of U.S. Patent No. 6,491,324 to Schmitz et. al. ("Schmitz").

Regarding claim 3, Kaule in view of Weitzen discloses the value document according to claim 1, but fails to disclose a third feature substance.

Schmitz teaches the concept of providing a third feature substance (magnetic layer 5) provided on a value document substrate (see fig. 2), which is different from the first and second feature substances (inherent).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include the Schmitz magnetic layer within the value document of Kaule in view of Weitzen in order to provide security threads for the document, as explicitly taught by Schmitz (see col. 2, lines 16-17).

Regarding claim 4, Kaule in view of Weitzen and further in view of Schmitz discloses the value document according to claim 3, wherein at least one of the first and third feature substances is formed by at least one of a luminescent substance and a mixture of luminescent substances (Kaule luminescent substance 6).

Regarding claim 13, Kaule in view of Weitzen and further in view of Schmitz discloses the value document according to claim 3, wherein the third feature substance is provided on the value document substrate in the form of a coding (see Schmitz col. 2, lines 44-52).

Regarding claim 14, Kaule in view of Weitzen and further in view of Schmitz discloses the value document according to claim 1, wherein the third feature substance is printed on the value document substrate together with a printing ink in the form of a printed image (see Schmitz col. 2, lines 44-52).

Regarding claim 18, Kaule in view of Weitzen and further in view of Schmitz discloses the production method according to claim 15, wherein a third feature substance is applied to the value document substrate (see Schmitz col. 2, lines 44-52).



Regarding claim 19, Kaule in view of Weitzen and further in view of Schmitz discloses the production method according to claim 18, wherein the second and third feature substances are applied to the value document substrate as a mixture (see the combination set forth in the rejection of claim 3, above; note that when the second and third feature substances are laid on top of one another, the net result will be a mixture of the two).

Regarding claim 20, Kaule in view of Weitzen and further in view of Schmitz discloses the production method according to claim 18, wherein the third feature substance is printed on the value document substrate together with a printing ink in the form of a printed image (see Schmitz col. 2, lines 44-52).

Regarding claim 24, Kaule in view of Weitzen and further modified by Schmitz (in the manner set forth in the rejection of claim 3, above) discloses the method according to claim 23, wherein at least one characteristic property of at least one of the first and a third feature substance that is different from the first and second feature substance is used for checking the authenticity of the value document (note that the presence of Kaule luminescent particles confirms authenticity), and a coding formed by the first feature substance is used for the value recognition of the value document, if the user belongs to the first user group (note that the absence of Kaule luminescent particles indicates an absolute lack of value), and at least one characteristic property of the second feature substance is used for checking the authenticity of the value document (note that an absence of the Weitzen coding indicates a counterfeited article), and the coding formed by the second feature substance is used for the value recognition of the

value document, if the user belongs to the second user group (see Weitzen col. 3, lines 58-61).

Regarding claim 25, Kaule in view of Weitzen and further modified by Schmitz (in the manner set forth in the rejection of claim 3, above) discloses the method according to claim 24 wherein the first feature substance is a luminescent substance (Kaule luminescent substance 6), and for the authenticity check or value recognition by a user of the first user group, the first feature substance is irradiated with radiation from its excitation range (see Kaule col. 5, lines 35-39), the emission is determined at at least one wavelength from the emission range of the first feature substance (note that in Kaule fig. 1, the wavelengths of a variety of luminescent materials are provided, each wavelength being far less than 10 micrometers; note further that in order to properly inspect the value document, a user will naturally hold the document at a distance of greater than 10 micrometers away from his/her eyes), and the check of at least one of authenticity and the value recognition is carried out on the basis of the determined emission (note that the presence of luminescent particles confirms authenticity).

Regarding claim 26, Kaule in view of Weitzen and further modified by Schmitz (in the manner set forth in the rejection of claim 3, above) discloses the method according to claim 25, wherein the second feature substance is luminescent substance (see Weitzen fig. 1), for the authenticity check or value recognition by a user of the second user group the second feature substance is irradiated with radiation from its excitation range, the emission is determined at at least one wavelength from the emission range of the second feature substance, and the check of at least one of authenticity and the

value recognition is carried out on the basis of the determined emission (note that in Kaule fig. 1, the wavelengths of a variety of luminescent materials are provided, each wavelength being far less than 10 micrometers; note further that in order to properly inspect the value document, a user will naturally hold the document at a distance of greater than 10 micrometers away from his/her eyes); also see Weitzen col. 3, lines 58-61).

Regarding claim 27, Kaule in view of Weitzen and further modified by Schmitz (in the manner set forth in the rejection of claim 3, above) discloses the method according to claim 26, wherein at least one of the first and second feature substances is irradiated with at least one of visible and infrared radiation, and the emission of the irradiated feature substance is determined in the infrared spectral range (see Kaule col. 1, lines 15-18).

Regarding claim 28, Kaule in view of Weitzen and further modified by Schmitz (in the manner set forth in the rejection of claim 3, above) discloses the method according to claim 25, wherein the irradiation is performed with a light-emitting diode or laser diode (see Kaule col. 5, lines 35-39, specifying that various light sources such as halogen lamps may be used; note that per the Meriam-Webster dictionary, a "diode" is "an electronic device that has two terminals"; note further that a halogen lamp is an electronic device that has two terminals; note further that halogen lamps emit light; accordingly, the halogen lamps taught by Kaule are "light-emitting diodes").

Regarding claim 29, Kaule in view of Weitzen and further in view of Schmitz discloses the value document according to claim 3, wherein the third feature substance is provided as a printing (see Schmitz col. 8, lines 34-36).

Regarding claim 32, Kaule in view of Weitzen and further in view of Schmitz discloses the value document according to claim 13, wherein the third feature substance is provided as a printing (see Schmitz col. 8, lines 34-36).

Regarding claim 33, Kaule in view of Weitzen and further in view of Schmitz discloses the production method according to claim 18, wherein the third feature substance is applied by printing (see Schmitz col. 8, lines 34-36).

Regarding claim 34, Kaule in view of Weitzen and further in view of Schmitz discloses the production method according to claim 19, wherein the third feature substance is applied to the value document substrate as a separate substance (see Schmitz col. 8, lines 34-36).

5. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule in view of Weitzen and further in view of U.S. Patent Application Publication No. 2004/0084277 to Blair ("Blair").

Regarding claim 9, Kaule in view of Weitzen discloses the value document according to claim 1, but fails to disclose the value document substrate comprising a printed or unprinted cotton paper.

Blair teaches the concept of providing a value document substrate comprising a printed or unprinted cotton paper (see paragraph 6, lines 6-7).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the Blair cotton pulp in order to make the document of value of Kaule in view of Weitzen, in order to give it better durability than commercial papers and a distinctive feel, as explicitly taught by Blair (see paragraph 6, lines 7-9).

Regarding claim 17, Kaule in view of Weitzen and further in view of Blair discloses the production method according to claim 15, wherein the value document substrate is formed by a printed or unprinted cotton paper formed from a moist paper web during its production (note that the use of the Blair cotton pulp requires that the value document consist of a moist paper web at some point during production), and the second feature substance is sprayed onto the moist paper web during papermaking (see the combination set forth in the rejection of claim 9, above, wherein the Blair cotton paper is used as the substrate onto which the Kaule and Weitzen elements are applied).

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JUSTIN V. LEWIS** whose telephone number is (571)270-5052. The examiner can normally be reached on **M-F 7:30am - 5:00pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/  
Supervisory Patent Examiner, Art Unit 3725  
/JVL/